Open Proficiency Testing Procedures

1 Introduction

The Proficiency Test Representative (PTR) of the Trace Evidence Unit (TEU) and the PTR of the Scientific and Biometrics Analysis Unit (SBAU) will distribute, evaluate, and record proficiency tests for their units, respectively. This document supplements the requirements for proficiency testing outlined in the FBI Laboratory Quality Assurance Manual (QAM) and FBI Laboratory Operations Manual (LOM) - *Practices for Open Proficiency Testing*.

2 Scope

2.1   This document applies to individuals conducting examinations in the disciplines of Hairs and Fibers, Geology, and Anthropology.

2.2   Forensic examiners within the Hairs and Fibers discipline will be tested once per year in the examination and comparison of hairs and in the examination and comparison of textile fibers.

2.3   Forensic examiners within the Geology discipline will be tested once per year in the examination and comparison of glass and in the examination and comparison of soil.

2.4   Forensic examiners within the Anthropology discipline will be tested once per year in the examination and/or comparison of skeletal remains.

2.5   Physical Scientists within the Hairs and Fibers discipline will be tested once per year in debris screening for apparent hairs and/or textile fibers.

2.6   All tests will be purchased from an approved outside vendor, where appropriate. If an appropriate external test is not available, an internal proficiency test will be prepared.

3 Procedures

3.1   Proficiency tests will be assigned and worked in the proficiency test section of Forensic Advantage (FA). Each Forensic Examiner (FE) will process and conduct the appropriate examinations on the items in their proficiency test as they would for normal casework. The FE will prepare a *Laboratory Report* (7-1 LIMS) and complete all sections of the external provider's results form, where appropriate.

3.2   All proficiency tests will be technically and administratively reviewed and verified using the same procedures applied to casework, where appropriate. Debris screening proficiency tests will be technically and administratively reviewed prior to submission.

3.3   Completed external provider data sheets will be included in the administrative and technical review process.

4 External Proficiency Testing

4.2   Prior to external proficiency tests being distributed to the test participant, the Technical Leader (TL) will review the external proficiency test design. If the design of the test will require departure from standard procedures or additional instruction, the TL will provide this information to the test participants to ensure consistency amongst participants. This communication will be recorded.

5 Internal Proficiency Testing

5.1   When an outside provider is unavailable for a type of examination an internal test will be designed.

5.2   The PTR will coordinate with the appropriate technical leader to design the necessary tests, prepare samples, and prepare tests according to the LOM - *Practices for Open Proficiency Testing*.

6 Preparation of an Internal Proficiency Test

6.1   Each internal proficiency test will be accompanied by a request for examination from a contributing agency that describes the types of submitted items and any available names of suspect(s) and victim(s). The letter will indicate the examinations needed in the case. The test preparer will prepare the request for examination and add it to the case object repository in FA.

6.3   The internal tests will follow an approved test design. Test designs will vary, as necessary, to include different types of testing conducted within each discipline.

6.4   The proficiency test will be provided by the PTR to each test participant.

6.5   An Open Proficiency Test Sample/Test Preparation Form (Appendix A) will be completed by the PTR or Supervisor. This form will be maintained with the proficiency test records.

8 Evaluation of Proficiency Tests

The appropriate PTR will evaluate each completed test in compliance with LOM - *Practices for Open Proficiency Testing*. If the PTR is being tested, the appropriate Unit Chief or Supervisor will perform the evaluation of the PTR's results.

9 Records

9.1   All appropriate proficiency test records as defined in the LOM - *Practices for Open Proficiency Testing* will be maintained in FA.

9.2   All samples from proficiency testing will be stored in an appropriate container. These will be maintained in a location designated by the appropriate PTR or Unit Chief for at least one proficiency test cycle.

9.3   Records of internal test design, internal sample preparation, and internal test preparation will be maintained by the appropriate PTR.

10 References

- FBI Laboratory Operations Manual - *Practices for Open Proficiency Testing*.

- FBI Laboratory Quality Assurance Manual.

Rev. #	Issue Date	History
8	02/03/2020	Updated SBAU-Trace name in Scope. Changed 'geological' to 'geologically-derived' throughout. Updated Section 3.1 to clarify. Added Section 4.3. Added review requirements to Section 8.2.
9	05/03/2021	Added tests taken for personnel to Scope. 'Category of testing' changed to 'discipline' throughout and categories updated. Updated Scope to correspond to disciplines. Combined specific test type requirements in Procedures and Preparation of Internal Proficiency Tests to reduce redundancy. Reference to TEDAC Laboratory report 7-273/7-273 LIMS removed throughout.

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Approval

Trace Evidence Unit Chief: Date: 04/30/2021

Scientific and Biometrics
Analysis Unit Chief: Date: 04/30/2021

Hairs and Fibers Technical
Leader: Date: 04/30/2021

Geology Technical Leader: Date: 04/30/2021

Anthropology Technical
Leader: Date: 04/30/2021

QA Approval

Quality Manager: Date: 04/30/2021

Appendix A: *Trace Evidence Open Proficiency Test Sample/Test Preparation Form*

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